Fall 2011 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD2098	Overall LMA	Total LMA				
Reclamation District No. 2098 Cache	Rating	Miles				
and Haas Slough	U	10.96				h
Rated Item Earthen Levee	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	
Vegetation	3.29		3.29	30.02%		
Trim / Thin Trees	0.01		0.01	0.09%		
Supplemental LICA OF Francian Courses	0.00		0.00	0.400/		
USACE Erosion Survey LMA Totals:	0.02 3.32	0.00	0.02 3.32	0.18% 30.29%	0.00	0.00
1.0. 0			J.JZ	30.2970	0.00	0.00
Unit No. 01 Yolo Bypass RB	Overall Unit Rating	Total Unit Miles				
RD2098	U	3.58				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	
Earthen Levee Vegetation	3.29		3.29	91.90%		
Unit Totals:	3.29	0.00	3.29	91.90%	0.00	0.00
Unit No. 01A Cross Levee RB	Overall Unit Rating	Total Unit Miles				
RD2098	A	0.55				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroad PO Miles	
No Items Unit Totals:	0.00	0.00	0.00	0.00%	0.00	0.00
Unit No. 02 Cache Slough LB	Overall Unit Rating	Total Unit Miles				
RD2098	A	2.01				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	
No Items Unit Totals:	0.00	0.00	0.00	0.00%	0.00	0.00
Unit No. 03 Haas Slough RB	Overall Unit Rating	Total Unit Miles				
RD2098	Α	1.89				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	
Supplemental USACE Erosion Survey	0.01		0.01	0.53%		
Unit Totals:	0.01	0.00	0.01	0.53%	0.00	0.00
Unit No. 04 Back Levee LB	Overall Unit	Total Unit				
	Rating	Miles				
RD2098	A	2.93			Encroad	hments
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	PO Miles	
Farthen Levee						
Earthen Levee Trim / Thin Trees	0.01		0.01	0.34%		
Trim / Thin Trees Supplemental						
Trim / Thin Trees	0.01 0.01 0.02	0.00	0.01 0.01 0.02	0.34% 0.34% 0.68%	0.00	0.00

LMA District Cover Sheet

Fall 2011 Levee Inspection Results

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)						
* Overall LMA Rating (Fall Only)			U							
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effect	ct overall annual rating.						
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.										
FALL INSPECTIONS: The overall maintena within the attached ur		ve is based on operat	ion and maintenance de	ticiencies identified						
Comments										

Unit Cover Sheet

Fall 2011 Levee Inspection Results

Reclamation District No. 2098 Cache and Haas Slough

	Water	way		Bank	Unit Miles
	Right	3.58			
	Spring (March - May)	Summer (June - August)	(September - November) Fall		Winter ber - February)
Unit Maintenance Rating (Fall Only)			U		
Date of Inspection	4/20/2011 - 4/20/2011		10/20/2011 - 10/20/2011		
DWR Inspector	Herman Phillips		Herman Phillips		
Accompanied By	Mike Hardesty RD 2098		Mike Hardesty RD 2098		
Check one:					
project components conditions other tha	vinter (or summer) inspection p identified in the attached Leve n the results of our normal mai ed in the enclosed report.	ee Inspection Report by	Mile. We have found no chang	ges in flo	
project components maintenance and th following changes ir (In the comment see	vinter (or summer) inspection p identified in the attached Leve e corrections we have made to a flood project conditions.	ee Inspection Report by o maintenance deficiend eet(s), identify change of	Mile. In addition to the results cies identified in the report, we of condition by: Start to End Le	of our no have fou	ormal und the or GPS
coordinates, location	n (Land Side, Water Side, or C	rown), Item identificatio	on, and description of the curre	ent condi	tion).
information must also be s	3	eet should be signed ar	nd dated by the LMA Represent ch 31 (Winter Inspection). Pleat aspection Reports charges, Suite 200	tative an	d returned to

Date

Signature of LMA Representative

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.58	10/20/2011 10/20/2011	Herman Phillips

LMR	Levee	Mile	Category	Item	Location	Rating	Action/Comment	GPS Latitud	Issue No.	
No.	Start	End	Calegory	Item	tion	ng	Action/Comment	Start	End	Photo
1	0.00	0.00	Earthen Levee	Vegetation	WS	M	Remove the wild growth other than native grasses from the levee slopes.	38.329118 ° -121.694060 °	38.329118 ° -121.694060 °	3 Y
2	0.00	0.00	Earthen Levee	Vegetation	LS	М	Remove the wild growth other than native grasses from the levee slopes.	38.329118 ° -121.694060 °	38.329118 ° -121.694060 °	7 Y
3	0.17	1.95	Earthen Levee	Vegetation	LS	M	Remove the wild growth other than native grasses from the levee slopes.	38.326610 ° -121.694064 °	38.300761 ° -121.693626 °	1
4	0.22	1.71	Earthen Levee	Vegetation	WS	М	Remove the wild growth other than native grasses from the levee slopes.	38.325896 ° -121.694065 °	38.304308 ° -121.693669 °	2

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.58	10/20/2011 10/20/2011	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Water Side
Category	Earthen Levee
Item	Vegetation
Looking down unit 1 from waterside. Photo taken 2	
phillips_f_20111212_151.jpg	
Levee Mile Report Line	2

Levee Mile Report Line	2
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Unit 1 looking downstrea mile 0.00. Photo taken 1	
phillips_f_20111212_152.jpg	





Unit Cover Sheet

Fall 2011 Levee Inspection Results

	Water	way		Bank	Unit Miles
	Unit No. 01A C	Cross Levee		Right	0.55
	Spring (March - May)	Summer (June - August)	(September - November) Fall		Winter ber - February)
Unit Maintenance Rating (Fall Only)			Α		
Date of Inspection	4/20/2011 - 4/20/2011		10/19/2011 - 10/19/2011		
DWR Inspector	Herman Phillips		Herman Phillips		
Accompanied By	Mike Hardesty RD 2098		Mike Hardesty RD 2098		
	vinter (or summer) inspection p				
conditions other tha	identified in the attached Leve in the results of our normal ma ed in the enclosed report.	ee Inspection Report by intenance and the corre	Mile. We have found no changections we have made to main	ges in flo tenance	od project
project components maintenance and th following changes in	vinter (or summer) inspection p identified in the attached Leve e corrections we have made to n flood project conditions.	ee Inspection Report by o maintenance deficience	Mile. In addition to the results cies identified in the report, we	of our no have fou	ormal und the
	ction below or on additional sho n (Land Side, Water Side, or C				
Comments					
information must also be	3	eet should be signed ar	nd dated by the LMA Represent ch 31 (Winter Inspection). Pleast spection Reports c, Suite 200	itative an	nd returned to
X Signature of LMA Repres	sentative		Date		

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01A Cross Levee	Right	0.55	10/19/2011 10/19/2011	Herman Phillips

-	Leve	e Mile	Category	Item	Locat	Ratir	Action/Comment	GPS Latitud	Issue No.	
3	Start	End	Category	item	tion	ng	Action/Comment	Start	End	Photo
	1 0.00	0.00	Earthen Levee	Vegetation	WS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.277411 ° -121.696281 °	38.277411 ° -121.696281 °	
	2 0.00	0.00	Earthen Levee	Vegetation	WS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.277411 ° -121.696281 °	38.277411 ° -121.696281 °	

Levee Inspection Report By Mile - Fall 2011

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01A Cross Levee	Right	0.55	10/19/2011 10/19/2011	Herman Phillips

Levee Mile Report Line	1								
Start Levee Mile	0.00								
End Levee Mile	0.00								
Location	Water Side								
Category	Earthen Levee								
Item	Vegetation								
Landward levee slope levee mile 0.00 Unit 1A. Photo taken 10-19-2011.									
phillips_f_20111212_153.jpg									
Levee Mile Report Line	2								

Levee Mile Report Line	2
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Water Side
Category	Earthen Levee
Item	Vegetation
Waterward levee slope U	Init 1A looking

downstream from levee mile 0.00. Photo taken 10-19-2011.

phillips_f_20111212_154.jpg





Unit Cover Sheet

Fall 2011 Levee Inspection Results

Reclamation District No. 2098 Cache and Haas Slough

	Water	way		Bank	Unit Miles
	Unit No. 02 Ca	ache Slough		Left	2.01
	Spring (March - May)	Summer (June - August)	(September - November) Fall		Winter ber - February)
Unit Maintenance Rating (Fall Only)			Α		
Date of Inspection	4/20/2011 - 4/20/2011		10/19/2011 - 10/19/2011		
DWR Inspector	Herman Phillips		Herman Phillips		
Accompanied By	Mike Hardesty RD 2098		Mike Hardesty RD 2098		
	vinter (or summer) inspection p				
project components conditions other tha	identified in the attached Leve n the results of our normal mai ed in the enclosed report.	ee Inspection Report by	Mile. We have found no chang	ges in flo	
project components maintenance and th following changes ir (In the comment see	vinter (or summer) inspection p identified in the attached Leve le corrections we have made to in flood project conditions. ction below or on additional sho in (Land Side, Water Side, or C	ee Inspection Report by o maintenance deficiend eet(s), identify change of	Mile. In addition to the results cies identified in the report, we of condition by: Start to End Le	of our no have fou	ormal und the or GPS
Comments			,		
One of the boxes above is information must also be	3	eet should be signed ar	nd dated by the LMA Represent ch 31 (Winter Inspection). Pleast spection Reports country, Suite 200	itative an	d returned to
X Signature of LMA Repres	sentative		Date		

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	2.01	10/19/2011 10/19/2011	Herman Phillips

LMR	Levee	Mile	Category	Item	Locati	Rati	Action/Comment	GPS Latitud	Issue No.	
No.	Start	End	Category	item	tion	ng	Action/Comment	Start	End	Photo
1	5.29	5.29	Earthen Levee	Vegetation	WS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.275706 ° -121.705698 °	38.275706 ° -121.705698 °	
2	5.29	5.29	Earthen Levee	Vegetation	LS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.275706 ° -121.705698 °	38.275706 ° -121.705698 °	

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	2.01	10/19/2011 10/19/2011	Herman Phillips

Levee Mile Report Line	1						
Start Levee Mile	5.29						
End Levee Mile	5.29						
Location	Water Side						
Category	Earthen Levee						
Item	Vegetation						
Looking downstream from levee mile 5.29 Unit 2 waterward levee slope. Photo taken 10-19-2011. phillips_f_20111212_155.jpg							
Levee Mile Report Line	2						

phillips_f_20111212_155.jpg	
Levee Mile Report Line	2
Start Levee Mile	5.29
End Levee Mile	5.29
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Looking downstream fror landside. Photo taken 10	
phillips_f_20111212_156.jpg	





Unit Cover Sheet

Fall 2011 Levee Inspection Results

Reclamation District No. 2098 Cache and Haas Slough

	Water	way		Bank	Unit Miles					
	Unit No. 03 H	aas Slough		Right	1.89					
	Spring (March - May)	Summer (June - August)	(September - November) Fall		Winter ber - February)					
Unit Maintenance Rating (Fall Only)		, ,	A							
Date of Inspection	4/20/2011 - 4/20/2011		10/19/2011 - 10/19/2011							
DWR Inspector	Herman Phillips		Herman Phillips							
Accompanied By	Mike Hardesty RD 2098		Mike Hardesty RD 2098							
Check one:										
project components conditions other tha	identified in the attached Leve	e Inspection Report by	e inspected the levee and asso Mile. We have found no chang ections we have made to maint	ges in flo						
project components maintenance and th following changes in	identified in the attached Leve e corrections we have made to a flood project conditions.	ee Inspection Report by o maintenance deficience	e inspected the levee and asso Mile. In addition to the results cies identified in the report, we of condition by: Start to End Le	of our no have fou	ormal und the					
coordinates, location	n (Land Side, Water Side, or C	crown), Item identification	on, and description of the curre	ent condi	tion).					
Comments										
information must also be s DWR with any additional s	One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to: DWR Summer/Winter Inspection Reports 3310 El Camino Avenue, Suite 200 Sacramento, CA 95821-9000									

Date

Signature of LMA Representative

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.89	10/19/2011 10/19/2011	Herman Phillips

LMR	Levee	Mile	Cotogogy	Item	Location	Rating	Action/Comment	GPS Latitud	de/Longitude	Issue No.
No.	Start	End	Category	item	tion	†ing	Action/Comment	Start	End	Photo
1	7.10	7.15	Earthen Levee	Cracking	LS	С	Monitor and have inspected by geotechnical engineer.	38.292980 ° -121.721892 °	38.292995 ° -121.723093 °	1
2	7.30	7.30	Earthen Levee	Vegetation	LS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.294171 ° -121.725037 °	38.294171 ° 121.725037 °	5 Y
3	7.30	7.30	Earthen Levee	Vegetation	WS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.294171 ° -121.725037 °	38.294171 ° -121.725037 °	6 Y
4	7.33	7.33	Supplemental	USACE Erosion Survey	WS	М	Inspector Comments: 2011: Large vertical erosion pockets and bank slumping. [2011 Site ID: HAS_7-9_R]	38.294858 ° -121.725433 °	38.299606 ° -121.728621 °	7
5	7.70	7.74	Earthen Levee	Cracking	WS	С	Monitor and have inspected by geotechnical engineer.	38.298843 ° -121.728588 °	38.299450 ° -121.728463 °	2

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.89	10/19/2011 10/19/2011	Herman Phillips

Levee Mile Report Line	2			
Start Levee Mile	7.30			
End Levee Mile	7.30			
Location	Land Side			
Category	Earthen Levee			
Item	Vegetation			
Looking downstream from levee mile 7.30 Unit 3. Phot taken 10-19-2011.				
phillins f 20111212 157 ina				

phillips_t_20111212_157.jpg			
Levee Mile Report Line	3		
Start Levee Mile	7.30		
End Levee Mile	7.30		
Location	Water Side		
Category	Earthen Levee		
Item	Vegetation		
Looking downstream from levee mile 7.30 Unit 3. Photo taken 10-19-2011.			
phillips_f_20111212_158.jpg			





Unit Cover Sheet

Fall 2011 Levee Inspection Results

Reclamation District No. 2098 Cache and Haas Slough

	Bank	Unit Miles				
	Unit No. 04 Back Levee					
	Spring Summer (September - November) (March - May) (June - August) Fall					
Unit Maintenance Rating (Fall Only)			Α			
Date of Inspection	4/20/2011 - 4/20/2011		10/19/2011 - 10/19/2011			
DWR Inspector	Herman Phillips		Herman Phillips			
Accompanied By	Mike Hardesty RD 2098		Mike Hadesty RD 2098			
Check one:	inter (or augment) increation of	oried my staff or I have	a inspected the layer and acce	ociotod fl	and	
project components conditions other tha	identified in the attached Leve	ee Inspection Report by	e inspected the levee and asso Mile. We have found no chan ections we have made to maint	ges in flo		
project components maintenance and th following changes ir (In the comment see	identified in the attached Leve e corrections we have made to a flood project conditions. ction below or on additional sho	ee Inspection Report by o maintenance deficiend eet(s), identify change of	e inspected the levee and assorting Mile. In addition to the results cies identified in the report, we of condition by: Start to End Leon, and description of the curre	of our no have fou	ormal und the or GPS	
Comments						
information must also be s DWR with any additional s	One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to: DWR Summer/Winter Inspection Reports 3310 El Camino Avenue, Suite 200 Sacramento, CA 95821-9000					

Date

Signature of LMA Representative

Levee Inspection Report By Mile - Fall 2011

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.93	10/19/2011 10/19/2011	Herman Phillips

LMR	Levee	Mile	Category	Item	Location	Rating ** Locatio	Action/Comment		GPS Latitude/Longitude		
No.	Start	End	Calegory	пеш	tion	ng	Action/Comment	Start	End	Photo	
1	9.19	9.19	Earthen Levee	Vegetation	LS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.316669 ° -121.740071 °	38.316669 ° -121.740071 °		
2	9.19	9.19	Earthen Levee	Vegetation	LS	Α	Remove the wild growth other than native grasses from the levee slopes.	38.316669 ° -121.740071 °	38.316669 ° -121.740071 °		
3	9.46	9.46	Supplemental	USACE Erosion Survey	WS	М	Inspector Comments: 2011: Several scallops of erosion. Erosion primarily due to the weight of cattle on the slope. [2011 Site ID: HAS_9-7_L]	38.320240 ° -121.740183 °	38.324587 ° -121.740254 °	4 Y	
4	9.81	9.81	Earthen Levee	Vegetation	WS	С	Remove the wild growth other than native grasses from the levee slopes.	38.324993 ° -121.740082 °	38.324993 ° -121.740082 °	1	
5	10.93	10.94	Earthen Levee	Trim / Thin Trees	WS	М	Trim trees to at least five feet above ground level.	38.340930 ° -121.740783 °	38.341077 ° -121.740735 °		

Levee Inspection Report By Mile - Fall 2011

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.93	10/19/2011 10/19/2011	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	•
	0.10
End Levee Mile	
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Looking downstream from Photo taken 10-19-2011.	

Levee Mile Report Line	2		
Start Levee Mile	9.19		
End Levee Mile	9.19		
Location	Land Side		
Category	Earthen Levee		
Item	Vegetation		
Looking downstroam from loves mile 0.10			

Looking downstream from levee mile 9.19 landward slope. Photo taken 10-19-2011.

phillips_f_20111212_160.jpg

phillips_f_20111212_159.jpg

F F-22 - 2 - 3F-3	
Levee Mile Report Line	3
Start Levee Mile	9.46
End Levee Mile	9.46
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_HAS_9-7_L_1.jpg	







LS	: Land Side			
W/S	· Water Side			

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor N : Not Inspected, see Inspector Comment

C : Corrected

Levee Inspection Report By Mile - Fall 2011

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.93	10/19/2011 10/19/2011	Herman Phillips

Levee Mile Report Line	3
Start Levee Mile	9.46
End Levee Mile	9.46
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_HAS_9-7_L_2.jpg	

Levee Mile Report Line	3
Start Levee Mile	9.46
End Levee Mile	9.46
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #3

USACE2011_HAS_9-7_L_3.jpg

Levee Mile Report Line	3
Start Levee Mile	9.46
End Levee Mile	9.46
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #4	
USACE2011_HAS_9-7_L_4.jpg	







* Location	
LS : Land Side	
WS : Water Side	
CR : Crown	

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor

N : Not Inspected, see Inspector Comment

C : Corrected